

HiFill® PEI BK

 Techmer Polymer Modifiers - *Polyetherimide*
General Information
General

Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> North America
Appearance	<ul style="list-style-type: none"> Black
Forms	<ul style="list-style-type: none"> Pellets
Processing Method	<ul style="list-style-type: none"> Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.27		ASTM D792
Molding Shrinkage - Flow (0.125 in)	6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.25	%	ASTM D570
Mechanical			
Nominal Value Unit Test Method			
Tensile Strength (Break)	16000	psi	ASTM D638
Tensile Elongation (Break)	7.0	%	ASTM D638
Flexural Modulus	510000	psi	ASTM D790
Flexural Strength	25000	psi	ASTM D790
Impact			
Nominal Value Unit Test Method			
Notched Izod Impact (73°F, 0.125 in)	1.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	24	ft·lb/in	ASTM D4812
Hardness			
Nominal Value Unit Test Method			
Rockwell Hardness (R-Scale)	109		ASTM D785
Thermal			
Nominal Value Unit Test Method			
Deflection Temperature Under Load (66 psi, Unannealed)	418	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	388	°F	ASTM D648
CLTE - Flow	3.0E-5	in/in/°F	ASTM D696
Electrical			
Nominal Value Unit Test Method			
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	500	V/mil	ASTM D149

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	285	°F
Drying Time	3.0	hr
Rear Temperature	675 to 735	°F
Middle Temperature	675 to 735	°F
Front Temperature	675 to 735	°F
Processing (Melt) Temp	670 to 730	°F
Mold Temperature	275 to 325	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 100	rpm

